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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,185	12/29/2000	Larry R. Fairbanks	CPS1540-203B	8520

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DUBLIN, OH 43017

EXAMINER

YIP, WINNIE S

ART UNIT	PAPER NUMBER
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3636

DATE MAILED: 01/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/751,185

Applicant(s)

FAIRBANKS ET AL.

Examiner

Winnie Yip

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 8-17, 21-26 and 29-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-17, 21-26, 29-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>November 16, 2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to applicant's amendment filed on October 17, 2005.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Specification

1. The disclosure is objected to because of the following informalities: the new Figure 4 (filed September 10, 2004) has not been described in the specification under sections of "Brief Description Of The Drawings" and "Detailed Description Of Exemplary Embodiment".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. Claims 1-4, 8-17, 21-26, and 29-36 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Culpepper et al. (US Patent No. 6,029,415) in view of Szabo (US Patent No. 4,352,771).

Culpepper et al. is considered to show and disclose, a vinyl siding panel comprising a facing panel (10) having at least two elongated planar portions (20) being edge-by-edge connected by a seam with a height to define a stepped contour (16) between the adjacent planar surfaces, each elongated planar portion (20) having a width extending between a first edge (22) and a second edge (16) of the planar portion, wherein each elongated planar portion (20) has a thickness about 0.035 inches (see col. 3, lines 48 or claim 16) and a width about 6 inches (or 12 inches of two planar portions) (see col. 8, line 31 or claim 17) which is in the range of "at least about 4 or 6 inches" as claimed. Culpepper et al. shows and discloses each elongated planar

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portion (20) having a substantially "slight concave face" (col. 1, line 33) (see figures show bellow) formed between the first (22) and second (16) edges of the planar portions (20) for reducing or eliminating the occurrence of oil canning as the claimed invention, wherein the slight concave surface (20), in an other word, inherently has "a slight curvature" including a suitable dimension of a radius curvature, and the "slight concave surface" may include a suitable surface variance defined from the outer surface of the planar portion to an imaginary straight line (d) connected between the first (22) and second (16) edges of the planar portion due to the flexibility of the vinyl portion and the rough surface of the material. Although Culpepper et al. do not define the slight concave planar surface (20) of the siding panel having a specific surface variance as claimed, Culpepper et al. discloses the vinyl siding having the planar portion having a thickness about 0.035 inches and a width about 6 inches substantially within the range of dimension as claimed. And, Szabo teaches a method of forming a vinyl siding comprising a forming fixture having passage to form a siding panel with a plurality of substantially planar portions each having a thickness of about 0.042 inch and a surface clearance (or surface variance) of from 0.05 to 0.075 within a range of about 0.05 includes as claimed (see col. 5. lines 1-6; lines 67-79 to col. 6, lines 1-10). Therefore, it would have been one of ordinary skill in the art, at the time the invention was made to modify a sliding panel of Culpepper et al. having the substantially planar portions being performed equally well with a slide concave surface having vary widths such as 4 or 6 inches as claimed and having a thickness to define a suitable radius curvature and having a surface variance of less than about 0.05 inches as taught by Szabo as obvious matter of engineering design choice to define the specific dimensions to achieve the same function of providing the siding panel with very desirable random shadow pattern to add

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strength thereon. And, for accommodating different applications when using an invention, having the same general structure would likely find different sizes or optimal dimensions of that structure with desirable appearance, and any such distinction would have been obvious as within the ordinary skill in the art. *See In re Pistilli*, 474 F. 2d 1024, 1026, 177 USPQ 262, 264 (CCPA 1973).

Regarding claims 14 and 34-36, although Culpepper et al. do not define the slight concave planar surface (20) of the siding panel having a specific radius curvature as claimed, Culpepper et al. discloses the planar portion (20) of the vinyl siding having a thickness about 0.035 inches and a width about 6 inches substantially within the range of dimension as claimed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vinyl siding panel of Culpepper having the slide curved planar surface having very specific widths at least about 4 inches to define a corresponding specific radius curvature at least about 85 inches as claimed because of the change of the size of the panel portion merely involve of changing of the dimension of the radius curvature, and changing dimension for accommodating different applications when using an invention, having the same general structure would likely find different sizes or optimal dimensions of that structure with desirable appearance, and any such distinction would have been obvious as within the ordinary skill in the art. *See In re Pistilli*, 474 F. 2d 1024, 1026, 177 USPQ 262, 264 (CCPA 1973).

Regarding claims 11-13 and 24, although Culpepper et al. do not specifically show the siding panel (5) having a third planar portion as claimed, Culpepper et al. discloses the siding panel (5) would include a plurality of similar planar portions (20) (See col. 4, line 37).

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Therefore, Culpepper et al.'s siding panel is considered to capably and specifically include one, two or three planar portions as claimed.

Regarding claims 2-3 and 15-16, Culpepper et al. further teaches using a reinforcement panel (12) made of a foam material being adhesively secured to the planar surfaces to reduce thermal loss and to increase the impact and crack resistance of the vinyl siding.

Regarding claims 9, 12, 22, and 25, although Culpepper et al. does not define the stepped contour of the seam between two adjacent planar surfaces of the siding panel having a specific height at least about 0.5 inches as claimed, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vinyl siding panel of Culpepper having the stepped contour of seam with a specific height of at least about 0.5 inches as claimed. since the applicant has not disclosed that the specific dimension of the height of the seam solves any stated problem or is for any particular purpose and it appears that the claimed invention would perform equally well with the stepped contour of the seam between two planar surfaces constructed with a specific height of about 0.5 inches to achieve the desirable result of siding panel of variety applications. And, for accommodating different applications when using an invention, having the same general structure would likely find different sizes or optimal dimensions of that structure with desirable appearance, and any such distinction would have been obvious as within the ordinary skill in the art. *See In re Pistilli*, 474 F. 2d 1024, 1026, 177 USPQ 262, 264 (CCPA 1973).

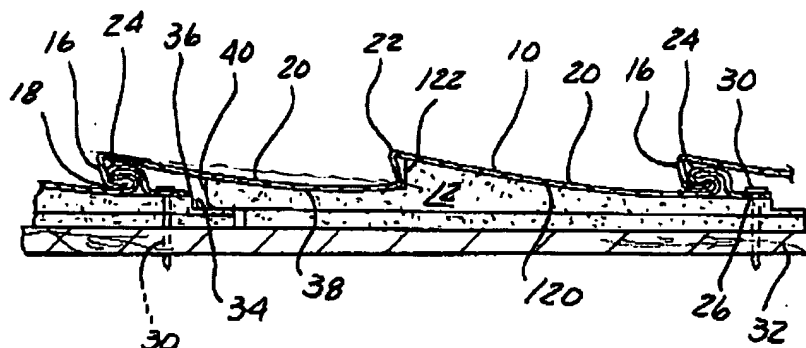


FIG - 2

3. Claims 1, 4, 8-14, 17, 21-26, 29-36 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Johnstone et al. '008 in view of Section 07460 on Siding of the Sweet's General Building & Renovation 1995 Catalog (referred to hereafter as the Sweet Catalog).

Johnstone et al. show and disclose, in Fig. 2, a vinyl siding panel comprising at least two substantially planar portion (46) each having a first and second edges being connected together by a seam to define a stepped contour with a suitable height, wherein each planar portion (46) inherently has a width extending between the first edge (52 or 42) to a second edge (40 or 44) of the planar portion, each planar portion (46) has a gently curved surface (see col. 4, line 47, in Fig. 2) inherently with a suitable radius curvature and a suitable surface variance (see col. 17, lines 17-24), wherein the surface variance is defined from the outer surface of the planar portion to a imaginary straight line connected between the first and second edge of the planar portion (see Fig. 2, the distance between two narrows). Johnstone et al. do not define the siding panel having up to three planar surfaces. Johnstone et al. also fail to specifically define each planar surface having a specific surface variance less than 0.05 inches between the first and second

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edges of the planar portions, and the specific dimension of the planar surface including the width of 4 inches or the thickness in a range of 0.04-0.05 inches, and the height of the seam between the planar surfaces being about 0.5 inches as claimed.

However, the Sweet Catalog teaches various vinyl siding products ranging from one or two planar portions (Castle Ridge on pages 10) and three planar portions (Chatham Ridge on page 11), the vinyl siding product having a width of the planar surface about 3-5 inches, the normal thickness of the planar surface in the range of 0.04-0.05 inches (see the listing of the products specifications on page 20 of the Sweet Catalog, and Restoration Portfolio HP on page 7), and the height of the seam about 0.5 inches (see the far right box on product Chatham Ridge on page 11). It would have been obvious to one ordinary skill in the art at the time the invention was made to modify the vinyl siding panel of Johnstone et al. to be a single lap, double lap and triple lap singles and having the specific dimensions in the width, the thickness and the height of seams between the laps and to achieve the specific surface variance/radius curvatures as claimed as taught by Sweet Catalog as an obvious matter of design choice to accommodate the user's preference, various building structures requirements, and to achieve a desired appearance since applicant has not disclosed that the siding panel having specific dimensions that provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected applicant's invention, the siding panel, to perform equally well with the specific width and thickness as taught by Sweet Catalog as claimed because those specific dimensions perform the same function of providing the siding panel having straight surfaces with sufficient strengthen to achieve suitable impact resistance as desired.

Response to Argument

4. Applicant's argument, filed October 17, 2005, with respect to the rejections of claims as being rejected under 35 U.S.C. 103(a) over Culpepper et al. and Johnstone et al. in view of Sweet Catalog has been fully considered and are not persuasive.

In response to applicant's argument of that Culpepper et al. and Johnstone et al. do not state that the drawings are to scale, we agree that this is so, however, it is not the part of the rejection. The references to Culpepper et al. and Johnstone et al. are only used to shown and teach the structure of a vinyl siding panel having at least two planar portions being connected together with a seam to define a stepped contour with a suitable height and each planar portion having a "slide curved surface". To discuss that whether or not the drawing of a reference was shown in scale is not a part of the rejection.

In response to applicant's argument that Culpepper et al. does not teach or suggest the use or benefits of a slight curvature as claimed invention, it is not deemed persuasive. Applicant argues that as described in the inventor declaration, a common amount of curvature used in the siding industry is characterized by at least about 0.130-0.170 inches of surface variance or less than approximately 10-25 inches of radius curvature of a width of at least 4 inches panel, there is no motivation to teach that Culpepper et al. departed from the standard industry practice by using a slight curvature as claimed invention. The fact that Culpepper et al. have recognized a vinyl siding panel having a problem that "often do not lay flat as a result of the deformation of the shape of the vinyl". Culpepper et al. have recognized "the concave or mechanical set face was introduced to vinyl siding panels to reduce or eliminate the occurrence of oil canning. Culpepper et al. further has recognized using a foam "that supports the profile of the vinyl (see col. 3, lines

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41-45) are realistically achieved” and using of the foam will “tended to straighten out the concave set placed in vinyl siding faces to resist oil canning” (see col. 1, lines 53-56) which teaches to solve a same problem to use a slight curved face with reduced curvature and less surfaced variance as claimed. Therefore, Culpepper et al. is considered to teach using a benefit of using a slight curvature surface with reduced surface variance to provide a curved but not straight surface to resist the oil canning problem. Szabo now used to teach a vinyl siding panel would have been modified to have a slight curved surface with significant variance as claimed invention. Since Culpepper et al. teach a vinyl siding having a width, a thickness, and a length substantially the same as claimed invention, it would have been one ordinary skill in the art to provide an elongate vinyl siding to provide a slight curvature equal well with a limited surface variance such as less than about 0.05 inches as claimed as taught by Szabo to solve the same problem of the claimed invention. Therefore, the rejection under Culpepper et al. combined with Szabo is granted.

In response to applicant's argument that there is no suggestion to combine the references of Johnstone et al. with the Sweet Catalog, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, applicant first states that Johnstone et al. do not disclose the vinyl siding panel having specific dimension of surface variances or radius curvatures as claimed. We agree that this is so, otherwise our rejection would have been entered

under section 102 of the statute. Applicant further mentions the dimensional limitations of each independent claim. While we acknowledge that the claims have these limitations, these limitations are not seen to distinguish over the combined teachings of Johnstone et al. and Sweet Catalog. The prior art, Johnstone et al. patent and Sweet Catalog, both disclose an elongate siding panel being made of vinyl material, having groove-tongue connection, and having a plurality of elongated planar surfaces connected by seams as claimed. Johnstone et al. further discloses an elongated vinyl siding panel having planar surfaces (46) generally having "a bend portion" with a suitable surface variance/ radius curvature (see Fig. 2) due to the flexibility of the elongated vinyl material (see col. 3, lines 17-24). Johnstone et al. disclose the elongated vinyl siding panel having structural limitation to limit the "bend portion" in order to provide a siding panel with straight faces to solve the same problem as claimed invention. Sweet Catalog is used as a reference only to teach a siding panel also being made of vinyl material and can be formed in various sizes with accommodated dimensions of planar surfaces in width, thickness, and total height of panel as claimed. Therefore, both Johnstone et al. and Sweet Catalog are considered to be the same art and the combination of the reference clearly meet the limitation of the rejection to solve the same problems as mentioned by applicant. One of ordinary skill in the art, furthermore, would have expected applicant's invention to perform equally well with very the dimensions of the planar surface to achieve the desirable surface variance or the radius curvature of the elongate curved planar surface of the references as claimed because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. This is a clear motivational teaching to modify the Johnstone et al. and Sweet Catalog combination.

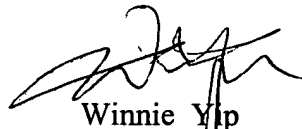
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Inquiry Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Winnie Yip whose telephone number is 571-272-6870. The examiner can normally be reached on M-F (9:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Winnie Yip
Primary Examiner
Art Unit 3636

wsy
January 19, 2006



Replacement Sheet

approved
11/24/04

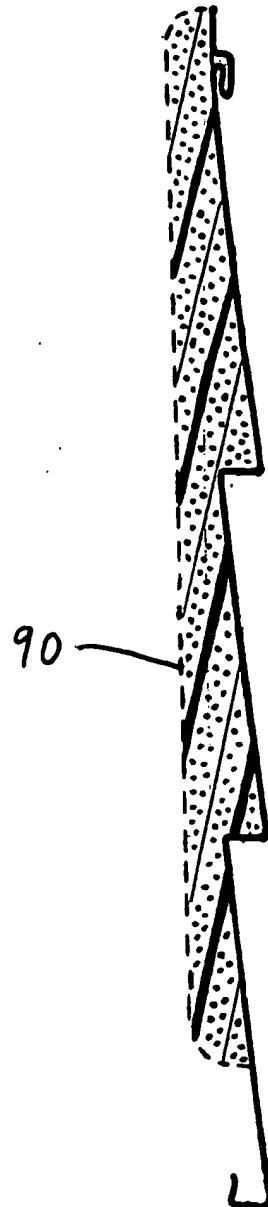


Figure 4